UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443,026	11/18/1999	NIMROD DIAMANT	042390.P7279	6674

7590   07/21/2003

STEVEN D YATES
BLAKELY SOKOLOFF TAYLOR ZAFMAN LLP
12400 WILSHIRE BOULEVARD
7TH FLOOR
LOS ANGELES, CA   90025

EXAMINER
ANYA, CHARLES E

ART UNIT	PAPER NUMBER
2126	7

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3/_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _12 May 2003_ .

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-9,11-22,26 and 27_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-9,11-22,26 and 27_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 3, 6, 11 – 14, 20 – 22 and 26 – 27 are rejected under 35 U.S.C.

103(a) as being unpatentable over U.S. Pat. No. 6,253,334 B1 to Amdahl et al. in

view of McIntyre.

As to claim 1, Amdahl teaches an Application Programming Interface (Multispan

Col. 6, Ln. 46 – 58), an Identify Address Function (LSLRegisterMLIDTag Col. 8, Ln. 42

– 53), a Base Driver (Driver 120, Driver 122 Col. 7, Ln. 62 – 67, MLID Col. 8, Ln. 42 -

53), Network Interface (NIC 124, NIC 126 Col. 8, Ln 1 – 21), an Update Node Address

Function ("...update call..." Col. 8, Ln. 54 – 62), a New Node Address, a Configuration

Storage and a Receive Address Filtering table (Col. 8, Ln. 54 – 62, Col. 9, Ln. 63 – 67).

Amdahl does not explicitly teach a stored node address.

McIntyre teaches a Stored Node Address (MAC Address Col. 7, Ln. 45 – 67). It would

have been obvious to apply the teaching of McIntyre to the system of Amdahl. One

would have been motivated to make such a modification to allow the program logic to

give override instructions to the drivers (Col. 7 Ln. 59 – 67).

As to claim 2, Amdahl teaches a Request ("...initialization..." Col. 8, Ln. 42 – 53)

and a Response (Col. 8, Ln. 52 – 53).

As to claim 3, Amdahl teaches the step of inspecting the configuration storage of the base driver, the storage contain an entry identifying the stored node address (Col. 8, Ln. 54 – 61).

As to claim 6, claim 1 meets claim 6 since claim 6 is a computer readable medium of claim 1.

As to claim 11, Amdahl teaches the step of providing transparent fail-over (Col. 4 – Col. 10), a First Network Interface (figure 3 Primary NIC 124), a Second Network Interface (figure 3 Secondary NIC 126), a Status Function ("...probe...", Col. 4, Ln. 35 – 59, Col. 5, Ln. 55 – 67, Col. 6, Ln. 1 – 20), a First Base Driver (figure 3 MLID Primary Driver 120: NOTE: The MLID Primary Driver 120 is associated with the Primary NIC 124), a Update Address Function ("...recovery procedure..." Col. 4, Ln. 35 – 59) and a Second Base Driver (figure 3 MLID Secondary Driver 122: NOTE: The Secondary MLID Driver 122 is associated with Secondary NIC 126).

As to claim 12, Amdahl teaches a Novell ODI Complaint Network (Novell Netware Implementation Col. 6, Ln. 21 – 46) and at least one ODI MLID Control Routine (figure 3 Primary MLID Driver 120).

As to claim 13, see the rejection of claims 1 and 11.

As to claim 14, Amdahl teaches the step of providing transparent load balancing of data transmissions (Col. 7, Ln. 56 – 67, Col. 8, Ln. 1 – 21), a Second Network Interface (NIC 124 Col. 8, Ln. 1 – 21), a Workload (Col. 8, Ln. 1 – 7), a Distribution Function (Multispan Prescan Module 110, Col. 7, Ln. 62 – 67, Col. 8, Ln. 42 – 61), a Portion of Data (Data Packets 104 Col. 7, Ln. 62 – 67).

As to claim 20, Amdahl teaches a Network Environment (figure 1), a First

Network Interface (Primary NIC Col. 4, Ln. 42 – 59), a First Driver (MLID Primary 120),

a Second Network Interface (Secondary NIC Col. 42 – 59), a Second Driver (MLID

Secondary 122), if the first network interface is inoperative, instructing the second driver

to store the first network interface address MAC address (Col. 4, Ln. 50 – 59: NOTE:

Designating one of the remaining NIC(s) as the new primary inherently implies changing

the secondary NIC MAC address to the old primary), directing the second driver to

activate second network interface (Process State 62 Col. 5, Ln. 55 – 67) and directing

the first driver to deactivate the first network interface (State 58 Col. 5, Ln. 55 – 67).

Amdahl is silent with reference to a driver memory and MAC address.

McIntyre teaches Driver Memory ("...multicast address..." Col. 9, Ln. 41 – 56) and MAC

Address (Col. 9, Ln. 30 – 56). It would have been obvious to apply the teaching of

McIntyre to the system of Amdahl. One would have been motivated to make such

modifications in order to register NIC driver (Col. 9, Ln. 41 – 46).

As to claim 21, Amdahl teaches a Novell Based Network (Novell Netware

Implementation Col. 6, Ln. 21 – 67) and Novell Netware implementation is ODI

complaint.

As to claim 22, see the rejection of claim 15.

As to claim 26, see the rejection of claim 1.

As to claim 27, see the rejection of claim 7.

Claims 4 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,253,334 B1 to Amdahl in view of McIntyre as applied to claim 1 above, and further in view of Fu et al (page 40 – 43).

As to claim 4, Amdahl teaches a Driver Identification Function (INETCFG Command, LSLRegisterMLIDTag Col. 8, Ln. 32 – 53).

Amdahl does not teach a response selected from a group consisting of a predetermined identifier, a base driver revision number and identification of a vendor of the base driver. Fu does not explicitly teach these limitations, however, Fu teaches that the MLID drivers registers information about themselves with the LSL. This information includes network card information. A predetermined identifier, a base driver revision number and identification of a vendor of the base driver are driver and network card information and are therefore implied. It would have been obvious to apply the teaching of Fu to the system of Amdahl. One would have been motivated to make such modifications in order to route data in packets for transmission (figure 2 page 41 line 5 – 34).

As to claim 5, see the rejection of claim 4.

Claims 7 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,253,334 B1 to Amdahl in view of McIntyre as applied to claim 1 above, and further in view of Weigel.

As to claim 7, Amdahl does not teach a first transmission function a compatible format, a network source, an incompatible format, a network destination and a second transmission function.

Weigel teaches a First Transmission Function (Driver Support Layer 306 Col. 7, Ln. 55 – 67), a Compatible Format and an Incompatible Format (Col. 7, Ln. 55 – 67), a Network Source (Network 310 Col. 7, Ln. 39 – 67), a Network Destination (I/O Manager 218, Executive 206 Col. 7, Ln. 66 – 67) and Second Transmission Function ("...a command..." Col. 8, Ln. 1 – 12). It would have been obvious to apply the teaching of Weigel to the system of Amdahl. One would have been motivated to makes such modifications to provide properly formatted bit pattern suitable for transmission over the network (Col. 8, Ln. 1 – 12).

As to claim 8, claim 7 meets claim 8 except for a report function and a receive function.

McIntyre teaches a Report Function (HeartBeat Logic 502 Col. 9, Ln. 49 – 56 and a Receive Capabilities Function (Col. 10, Ln. 35 – 44). It would have been obvious to apply the teaching of McIntyre to the system of Amdahl and Weigel. One would have been motivated to makes such modifications in order to periodically update the status table (Col. 10, Ln. 45 – 51).

As to claim 9, Amdahl does not explicitly teach a virtual LAN function and a disconnect function, however being that the multispan processes support LAN traffic and LAN drivers (Col. 6, Ln. 47 – 58), entering virtual LAN operative state will inherently be implemented and in Netware, packets are sent via event control block, which contains information on where to send the packet (Col. 7, Ln. 40 – 55) and inherently contains the end of packet transmission and therefore will support a disconnect function.

Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,131,163 to Weigel in view of applicant's admitted prior art (hereinafter referred to as APA page 6 – 7).

As to claim 15, Weigel teaches routing the first traffic to a virtual interface driver (Protocol Proxy Manager 350 Col. 9, Ln. 1 – 22), repackaging the first traffic by the virtual interface driver and providing the repackaged traffic to a virtual protocol stack (Protocol Proxy Manager 350 Transport Layer Col. 8, Ln. 66 – 67, Col. 9, Ln. 1 – 22: NOTE: Protocol Proxy Manager act as transport layer for the proxy protocol layers), sending the repackaged traffic to the intermediary layer and routing the repackaged traffic by the intermediary layer to an interface driver (Communication Path 356 Driver Support layer 306 Col. 7, Ln. 13 – 15).

APA teaches receiving first network traffic with a protocol stack ((Protocol Stack 220 page 6 line 26 – 31) and sending the first traffic to an intermediary layer (LSL 222 page 6, line 26 – 31). It would have been obvious to apply the teaching of APA to the system of Weigel. One would have been motivated to make such modification in order to transmit the data unto the wire (page 7, line 1 – 6).

As to claim 19, see the rejection of claim 15.

Claims 16 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.Pat. No. 6,131,163 to Weigel in view APA as applied to claim 15 above, and further in view of Amdahl et al.

As to claim 16, Weigel as applied to claim 15 is silent with reference to locating a fail over network interface having a node address memory, identifying a failed network

interface having a node address, storing the node address in the node address memory and routing network traffic for the failed network interface through the fail over network interface.

Amdahl teaches locating a fail over network interface having a node address memory (Col. 8, Ln. 54 – 61), identifying a failed network interface having a node address Col. 8, Ln. 54 – 61), storing the node address in the node address memory and routing network traffic for the failed network interface through the fail over network interface ("...update call...." Col. 8, Ln. 54 – 61). It would have been obvious to apply the teaching of Amdahl to the system of Weigel as applied to claim 15. One would have been motivated to make such modifications to provide a secondary driver for routing packets (Col. 8, Ln. 15 – 21).

As to claim 17, Weigel teaches a First Protocol Format and a Second Network Protocol Format (Col. 7, Ln. 55 – 67).

As to claim 18, Weigel teaches a Base Driver (Driver 304a Driver 304b Driver 304c).

Weigel does not teach a node identification request, a potential fail over network Interface, receiving a response from the driver, an authentication string, verifying the authentication string and a predetermined value.

Amdahl teaches a Node Identification Request ("...probe..." Col. 4, Ln. 42 – 59), a Potential Fail Over Network Interface ("...secondary NIC(s)..." Col. 4 Ln. 42 – 59) and receiving a response (Col. 4, Ln. 42 – 59). Although Amdahl is silent with reference to an authentication string, verifying the authentication string and a predetermined value,

the process of determining a probe packet failure, recovery procedure and process 45

entails providing information that shows the state of network interface (Col. 4, Ln. 42 –

59, Col. 5, Ln. 36 – 67). It would have been obvious to apply the teaching of Amdahl to

the system of Weigel. One would have been motivated to make such modifications to

provide a means of detecting network failure (Col. 4, Ln. 42 – 45).

Response to Arguments

2.   Applicant's arguments filed 5/12/03 have been fully considered but they are not

persuasive.

Applicant argues that the prior art reference (Amdahl) "teaches rewriting

incoming packets to direct them to a redundant NIC instead of the recited alteration of a

redundant NIC's filtering table address".

The Examiner agrees that Amdahl teaches redirecting incoming packets to a redundant

NIC when a NIC fails. As Applicant would agree this redirecting step would include

changing/switching from a failed NIC to a redundant NIC. If this were to be true, which I

think it is and I think the Applicant would agree that the address of the failed NIC would

have to be updated with the address of the redundant NIC as the primary NIC, so that

the incoming packets could be routed successful.

The "...update call..." (Col. 8 Ln. 42 – 67, Col. 9 Ln. 1 – 5) is a method/function call that

is implemented during fail-over (failure of a NIC) to update/replace/reset the address of

the failed NIC with address of the redundant NIC as the primary NIC, thus covering the

function of the "update node address function" of the claimed invention and traversing

Applicant's argument.

Conclusion

3.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Charles E Anya whose telephone number is (703) 305-

3411. The examiner can normally be reached on M – F (First Friday Off) from 8:30 am

to 5:30 pm.

The fax phone number for the organization where this application or proceeding

is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 305-

3900.

Charles E Anya
Examiner
Art Unit 2126

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100